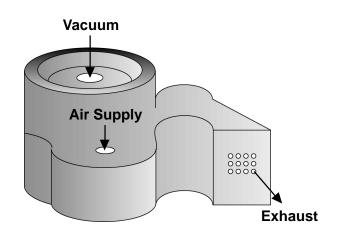


KEEP YOUR PRODUCT SHAPE!

Add Vacuum without a bulky external vacuum pump.

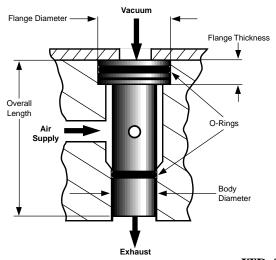
When it's important to maintain the shape, size and form of your product but you need to incorporate vacuum, consider **Air-Vac's Vacuum Sleeve Inserts**. Air operated, inserts are designed for maximum performance, minimum air consumption, will fit in the tightest locations and are made to be an integral part of your product.

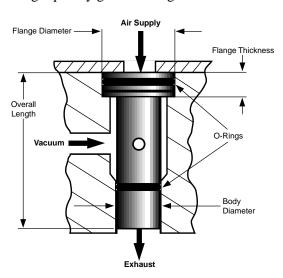


Two basic designs to fit your needs:

TD design provides straight thru vacuum passage.

AV design quickly generates high levels of vacuum.

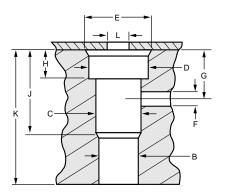




ITD & IAV INSERTS

Model Number	ITD209	ITD261	IAV093	IAV116	IAV147	IAV191
"A" Diameter	.209	.261	-	-	-	-
Flange Diameter	.625	.625	.437	.625	.625	.625
Body Diameter	.437	.437	.312	.437	.437	.437
Overall Length	1.94	2.125	1.50	1.87	2.125	2.28
Flange Thickness	.258	.258	.243	.258	.258	.258

Material: ITD-Steel; IAV-Brass



MACHINING SPECIFICATIONS

Dimension	ITD209	ITD261	IAV093	IAV116	IAV147	IAV191
"B" Dia + .003	.437	.437	.312	.437	.437	.437
"C" Dia + .005	.500	.500	.358	.500	.500	.500
"D" Dia + .003	.625	.625	.437	.625	.625	.625
"E" Dia +/005	.670	.670	.483	.670	.670	.670
"F" Dia + .003	.250	.250	.125	.250	.250	.250
"G" +/010	.532	.532	.437	.532	.532	.532
"H" +/002	.264	.264	.249	.264	.264	.264
"J" +/010	.750	.750	.625	.750	.750	.750
"K" (min.)	1.125	1.125	1.000	1.125	1.125	1.125
"L" Dia	.209	.261	.125	.125	.187	.187

Special inserts with physical specifications & performance variations can be made for any product.

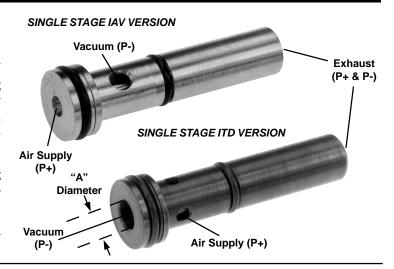


VACUUM SLEEVE INSERTS

Vacuum Sleeve Inserts are available in two versions. IAV versions quickly and effectively generate vacuum using compressed air as the energy source. They are primarily used in evacuation and purging applications and used with suction cups in material handling and lifting applications. The IAV versions are available in brass.

ITD versions have straight thru vacuum passage making them ideal for the transport or conveying of solid materials. ITD versions are available in steel.

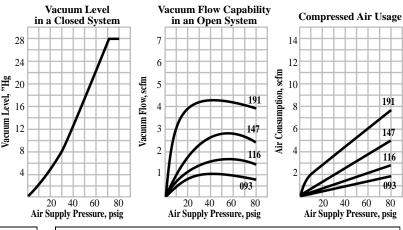
Both versions are easily installed. Provide a properly sized cavity and then simply push in a vacuum sleeve insert.



IAV Version

Produces vacuum levels up to 28.0"Hg and vacuum flow rates up to 4.3 scfm.

Model Number	IAV093	IAV116	IAV147	IAV191
Vacuum Level,-"Hg	28.0	28.0	28.0	27.8
Vacuum Flow, scfm	1.0	1.7	2.7	4.3
Air Consumption, scfm	1.9	2.7	4.3	7.5
Weight, oz.	.50	1.2	2.1	2.1
Flange Diameter, in.	.437	.625	.625	.625
Body Diameter, in.	.312	.437	.437	.437
Overall Length, in.	1.50	1.87	2.125	2.28
Flange Thickness, in.	.243	.258	.258	.258



Time	Time in Seconds to Evacuate a Volume of 1 Cubic Foot											
"Hg	1.5	3	6	9	12	15	18	21	24			
IAV093	3.0	6.0	13	22	33	47	65	85	114			
IAV116	2.0	4.0	8.0	13	19	27	37	50	68			
IAV147	1.0	3.0	5.0	9.0	13	20	27	39	52			
IAV191	.70	1.0	3.0	4.0	6.0	9.0	13	18	27			

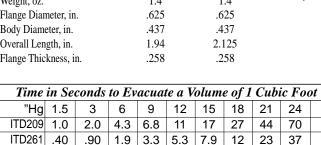
Vacuum Flow Rate, scfm vs. Vacuum Level,-"Hg											
"Hg	0	1.5	3	6	9	12	15	18	21	24	
IAV093	1.0	.92	.87	.74	.66	.55	.50	.37	.30	.16	
IAV116	1.7	1.44	1.32	1.18	1.04	.91	.75	.61	.51	.37	
IAV147	2.7	2.0	1.84	1.58	1.5	.85	.68	.49	.37	.41	
IAV191	4.3	4.14	3.73	3.21	2.90	2.30	1.74	1.34	.90	.49	

Vacuum Flow Capability

ITD Version

Have thru passages up to .261" diameter and generate vacuum flow rates up to 7.8 scfm.

Model Number	ITD209	ITD261
"A" Diameter, in.	.209	.261
Vacuum Level,-"Hg	24.8	24.8
Vacuum Flow, scfm	4.7	7.9
Air Consumption, scfm	8.1	13.0
Weight, oz.	1.4	1.4
Flange Diameter, in.	.625	.625
Body Diameter, in.	.437	.437
Overall Length, in.	1.94	2.125
Flange Thickness, in.	.258	.258

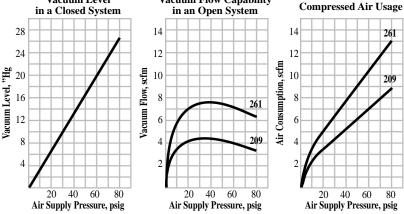


3.3

5.3

7.9

12



	Vacuum Flow Rate, scfm vs. Vacuum Level, "Hg										
Ī	"Hg	0	1.5	3	6	9	12	15	18	21	24
	ITD209	4.7	3.9	3.6	2.9	2.2	1.7	1.3	.72	.48	.44
	ITD261	7.9	5.6	5.1	4.2	3.0	2.2	1.8	1.06	.60	.42

.90

1.9

.40

Vacuum Level

[•] Operating temperature (degrees): 0 to 200 F

[·] All data recorded at 75 psig air supply.